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NATIONAL TRANSPORTATION SAFETY BOARD
WASHINGTON, D.C.

ISSUED: July 28, 1981

Forwarded to:

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SAFETY RECOMMENDATION(S)

P-81-20

At 4:45 p.m., c.s.t., on April 16, 1980, gasoline at the Williams Pipe Line Company's Minneapolis terminal in Roseville, Minnesota, sprayed from the fractured cast-iron base of a station booster pump at 72 psig pressure, vaporized, and exploded after it was ignited by the arcing of an electric switch in the mainline pump control room 50 feet downwind of the booster pump. 1/

The explosion killed one person and the following fire burned three other persons and destroyed the receiving manifold valves and piping, the station pumping equipment, and four vehicles. About 3,500 barrels (147,000 gallons) of petroleum products burned and property damage was estimated at \$3 million.

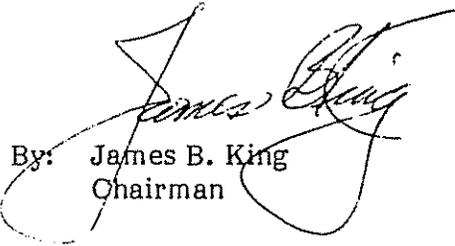
The newly installed pump together with its valves and fittings had not been hydrostatically tested as a completed facility prior to this accident. The electric switch in the mainline pump control room which was located 50 feet away from the failed station booster pump was not explosion-proof and it arced when disengaged.

1/ For more information, read Pipeline Accident Report--"Williams Pipe Line Company, Gasoline Explosion and Fire, Roseville, Minnesota, April 16, 1980" (NTSB-PAR-81-3).

Therefore, the National Transportation Safety Board recommends that the American Petroleum Institute, the American Gas Association, and the Interstate Natural Gas Association of America:

Advise its member companies of the circumstances of this accident and urge that they review the adequacy of their explosion-proof electrical systems and their hydrostatic test procedures. (Class II, Priority Action) (P-81-20)

KING, Chairman, DRIVER, Vice Chairman, McADAMS, GOLDMAN, and BURSLEY, Members, concurred in this recommendation.


By: James B. King
Chairman